NOTES ON DISTRIBUTION OF EVANIID WASPS IN WESTERN NORTH AMERICA (HYMENOPTERA: EVANIIDAE)¹

Roy R. Snelling²

ABSTRACT: New distribution data are given for Evaniella californica (Ashmead) and Hyptia oblonga Townes. A possible host, Parcoblatta americana (Scudder), is suggested for E. californica.

Evaniid wasps are parasitoids in the oothecae of roaches and attain their greatest abundance and diversity in the tropics of both Old and New Worlds. Proceeding away from the tropics, these unusual wasps become increasingly less common; in the arid lands of western North America they are decidedly uncommon. When I wrote my very brief paper (Snelling, 1963) on the evaniids of California, I recorded two species, known from a total of only seven specimens. The few additional specimens recorded below are thus of some interest.

Evaniella californica (Ashmead, 1901)

This species was described from a single male from Sacramento County, California. Snelling (1963) recorded additional material from Tuolumne County, California.

Two females extend the range of *E. californica* south to Tulare County. Both were collected at Kaweah Powerhouse Reservoir No. 3, at Ash Mountain. One was collected on 3 July 1982 by J. Halstead and one on 15 August 1982 by R.D. Haines.

On 23 June 1979 a single female was collected by R.R. Snelling and P. Mehlhop, about 5.8 mi. NE of Chico, Butte County, California, on the Cohasset Highway, elevation 475 feet. The specimen was taken while we were excavating a nest of the harvester ant, *Veromessor chicoensis* M. Smith, and was removed from a chamber into which it had darted when first exposed; the chamber was at a depth of about 2.5 cm. Within the upper chambers of this nest were individuals of both sexes of the roach, *Parcoblatta americana* (Scudder). This roach often resides within nests of *V. chicoensis* during the day and at night emerges to feed on debris in the chaff pile surrounding the nest. Another roach, *Ischnoptera deropeltiformis* (Bruner) has similar habits; both species were found associated with nests of *V. chicoensis* and *V. andrei* (Mayr) in Butte and Tehama Counties. One,

Received May 7, 1983. Accepted June 24, 1984.

²Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, California 90007.

or both, of these roach species may serve as host for the parasitoid.

Evaniella neomexicana (Ashmead, 1901)

This species was described from two male specimens collected at Las Cruces, New Mexico. Snelling (1963) recorded a third male from Riverside County, California. Two additional specimens are now available: 1σ , 5 mi. S. of Parker, Yuma County, Arizona, 13 April 1965 (D.A. Barstow); 1 φ , Kane Springs, Imperial County, California, 22 April 1964 (R.L. Westcott). According to Mr. Westcott (personal communication), the Kane Springs specimen was flying through a clump of *Ephedra* sp.

The female differs from the male specimens in that the entire body is

bright ferruginous.

Hyptia oblonga Townes, 1949

Townes (1949) described this from specimens from the Huachuca Mountains, Arizona (type locality) and from Alabama (Evergreen), Georgia (Spring Creek), Mexico (Cuernavaca) and Costa Rica (Suerre).

Two females were collected at La Laguna, 5500-5675 feet elevation, Sierra de la Laguna, Baja California Sur, Mexico, 28 August - 1 September 1977 (R.R. Snelling). This is the first record of the species in Lower California. The population there is almost certainly isolated from that which occurs to the northeast in southern Arizona. Presumably the range was continuous during the Tertiary when most or all of the intervening area was forested.

LITERATURE CITED

Ashmead, W.H. 1901. New species of Evaniidae. Canad. Entomol. 33: 300-304.Snelling, R.R. 1963. The evaniid wasps of California (Hymenoptera: Evaniidae). Pan-Pacific Entomol. 39: 107-108.

Townes, H. 1949. The Nearctic species of Evaniidae (Hymenoptera). Proc. U.S. Natl. Mus. 99: 525-539.